

House Committee on Veteran's Affairs

Subcommittee on Health

March 27, 2003

Testimony of John D. Shanley, M.D.

University of Connecticut Health Center

Good Morning and thank you, Mr. Chairman, for the opportunity to testify before the House Committee on Veteran Affairs, Subcommittee on Health regarding the Public Law 107-287, The Department of Veteran Affairs Emergency Preparedness Act of 2002.

I'd like to introduce myself – I am Dr. John D. Shanley, Professor of Medicine and Director of the Division of Infectious Diseases at the University of Connecticut Health Center in Farmington, CT and the Connecticut State Chair in Infectious Diseases and AIDS.

I have a long-standing relationship with the Veterans Administration. When I initially came to the University of Connecticut in 1982, my laboratory and offices were at the Newington Veterans Hospital, although I shared a joint appointment with the University of Connecticut. I have, in the past, had Career Development Awards for my research and served on the Merit Review Panels for the Department of Veteran's Affairs research program. I was also the Director of the Infectious Disease Program at the Newington VA Medical Center before moving to Farmington to become Director of Infectious Disease at the University Hospital.

I have also had a long-standing interest in the areas of biological warfare and terrorism and for two years was a member of the Infectious Disease Society of American Subcommittee on Bioterrorism. At the present time, I am part of the Smallpox Preparedness Program Phase 1 at the University of Connecticut and the Connecticut State Department of Public Health and am a member of the Vaccine Adverse Events Committee.

We have entered an era in our nation's history where the things that were previously unthinkable have become reality. Witness 9/11 and the events involving the use of anthrax in 2002. Thus, it is essential that this nation be prepare for the potential future use of agents of mass destruction.

The biological and chemical agents chosen for these kinds of acts have a number of important characteristics that have to be recognized for us to do our planning. As a group, these agents share a number of common characteristics. They are generally that can be delivered by aerosol transmission. They have to have a highly susceptible population, either military or civilian. The agents must be able to inflict a high rate of morbidity or mortality or otherwise paralyze the political and economic structure of the target. Finally, they must be initially difficult to diagnose and treat.

There are important differences among the agents that also need to be recognized for planning. Agents such as anthrax, toxins and gases will present themselves in a much different manner than some of the infectious agents. In general, they will behave more like a conventional weapon with a large-scale event effecting a large number of people at once. They do not transmit themselves after their initial exposure and the response will generally be something that would be amenable to handling by conventional first responders such as the police, fire department and biohazard teams.

Infectious agents such as smallpox are more likely to present in a very different manner. Recognizing this is extremely important in planning. Initially, these would generally present as sporadic cases that would not necessarily initially be recognized for what they are. There is person to person transmission which means they would initiate a rolling epidemic until effective containment could be put in place. In general, as they popped up in scattered areas they would initially be difficult to recognize until the magnitude of the event was recognized.

There are a number of examples that have occurred that provide us with insight as to how these events might develop and the potential magnitude that they may ultimately reach. . Although not thought to be a bioterrorist event, we can currently look at the spread of Severe Acute Respiratory Syndrome (SARS) that emerged in Asia and is now affecting the world. This highly contagious agent is a good example of what might occur with the release of an infectious agent and provides an indication of how difficult it is to contain such agents. History also contains important models from which we can learn. The best example is the flu pandemic of 1918 which

claimed more lives than both WWI and WWII and swamped the health deliver systems of that time.

All of these agents, whether infectious, gas or toxins or nuclear, all have the capacity to rapidly overwhelmed the current domestic health care system. In the winter of 2000, an epidemic of influenza in California rapidly overwhelmed the hospital capacity in the city of Los Angeles. Although this was an abnormally heavy year for influenza, it was not pandemic influenza and was not an event that would match the problems of a biological attack. This is why I feel the implementation of Public Law 107-287 is so important. This law will put in place an infrastructure that will allow responses to such potentially devastating events.

The VA has a long-standing role in clinical care, research and education and has an extensive infrastructure throughout the United States. Although its infrastructure has been somewhat weakened by diminished resources over the last 10 years, its staff and facilities are ideal to provide a platform for the implementation of Public Law 107-287. The establishment of regional centers to deal with bioterrorism is critical. This will form the basis for education of the medical community in the recognition and treatment of biological, chemical and nuclear events. It will also provide a platform for research of these agents in concert with state and federal public health agencies and with military agencies such as USAMRIID. It will provide a source for research and the development of diagnostics that are otherwise somewhat scattered at the present time.

Finally, in the event of a biological episode, this infrastructure can provide the treatment centers that will be needed to deal with the potential mass casualties that would otherwise overwhelm the civilian health care system. I feel that this legislation has far-reaching implications and I feel it is essential that it be implemented as expediently as possible.

Thank you for the chance to testify before the Committee and if I can answer any questions, I would be delighted.